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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/522,682

01/31/2005

Harald Mees

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EXAMINER

KIM, SUN U

ART UNIT

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1797

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/522,682	Applicant(s) MEES ET AL.	
	Examiner JOHN KIM	Art Unit 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) 10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/31/05</u> . | 6) <input type="checkbox"/> Other: _____ |

1. Applicant's election with traverse of Group I (claims 1-9) in the reply filed on 11/30/07 is acknowledged. The traversal is on the ground(s) that the claims 1 and 10 recite in the form of means-plus-function or step-plus function format, means for preventing bulging of the folds in the junction point area. This is not found persuasive because claims 1 and 10 are not in the form of means-plus-function or step-plus function format. The special technical feature of claim 1 is a filter element having a filter cylinder adjacent to a fluid-permeable support tube which is in the form of a filter mat web having a series of folds adjacent to each other at least in individual areas and two ends of which are connected to each other at a junction point for formation of an annular element which is shown by US Patent No. 5,622,624 (see figure 2; col. 6, lines 40-59) to lack novelty or inventive step and does not make a contribution over the prior art.

The requirement is still deemed proper and is therefore made FINAL.

2. Claim 10 is withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 11/30/07.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1 and 5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 is indefinite for failing to particularly point out positive structural elements providing a configuration effective at the junction point in preventing bulging of the folds in the area of the junction point as a result of flow of fluid. Claim 5 is indefinite for failing to particularly point out what is the dimensions determined for the flexible filter web that

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allows reversing of the annular elements so that fusion seam is in the interior on the reversed annular element.

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-7 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Lauer et al (US Patent No. 5,622,624).

Regarding claim 1, Lauer et al teach a filter element which has a filter cylinder (110) adjacent to a fluid-permeable support tube (116) through which filter cylinder the fluid to be filtered may flow from its interior and which is in the form of a filter mat web having a series of folds adjacent to each other at least in individual areas and the two ends (112) of which are connected to each other at a junction point for formation of an annular element (110), characterized by a configuration effective at the junction point by clamp (130) and adhesive material (122) in preventing bulging of the folds in the area of the junction point (see figure 2; col. 6, lines 40-59).

Regarding claim 2, Lauer et al teach that a configuration preventing bulging in the area of the junction point is formed in that the respective folds of the filter mat web (110) on the ends (112) are joined to each other along the end edges which face the inside of the annular element (110) to be formed, so that the two folds adjoining the junction point are positioned with their crowns on the outside on the annular element (110) and facing the support tube (116) (see figure 2; col. 6, lines 40-59).

Regarding claim 3, Lauer et al teach that filter mat is made of polyester fleece, glass fiber mat, paper fleece or plastic fabric (see col. 5, lines 3-15).

Regarding claim 4, Lauer et al teach that the connection of the ends (112) of the filter mat web is in the form of a fused seam by clamp (130) and adhesive material (122) (see figure 2; col. 6, lines 40-59).

Regarding claim 5, the annular element (110) of Lauer et al is inherently reversible to provide fused seam by clamp (130) and adhesive material (122) in the interior on the reversed annular element (110) (see figures 1-2).

Regarding claim 6, Lauer et al teach that the configuration preventing bulging in the area of the junction point has a retaining device (114) which has retaining elements (118), which overlap the adjacent folds on both sides of the annular element (110) on the sides of such folds facing away from the junction point (see figure 2; col. 6, lines 40-59).

Regarding claim 7, Lauer et al teach that the retaining elements are in the form of retaining projections (118) which are configured to project radially inward on the inside of the support tube (116) (see figure 2; col. 6, lines 40-59).

Regarding claim 9, Lauer et al teach that the retaining elements (230) are in the form of the legs of a clamping element U-shaped in cross-section, it being possible to insert such clamping element onto the folds adjacent to the junction point of the annular element (210) (see figure 3; col. 6, line 60 – col. 7, line 2; col. 7, lines 26-31).

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kersting (US Patent No. 4,735,720) in view of Bies et al (US Patent No. 5,736,045). Kersting teaches a filter element which has a filter cylinder in the form of a filter mat web (1) having a series of folds (2, 3) adjacent to each other at least in individual areas and the two ends of which are connected to each other at a junction point for formation of an annular element (1), characterized by a configuration effective at the junction point by encapsulating adhesive material (9) in preventing bulging of the folds in the area of the junction point (see figures 1-3; col. 2, line 17 – col. 3, line 15). Claim 1 essentially differs from the filter element of Kersting in reciting a fluid permeable support tube. Bies et al teach a filter element comprising a pleated filter mats (14) supported on support tube (12) with apertures (16) for the flowthrough of the medium filtered by filter mats (14) (see figures 3-4; col. 4, line 60 – col. 5, line 13). The combination of the prior art elements of the filter element of Kersting supported on the support tube of Bies et al would have yielded the predictable result of enhancing the support of the filter element and flowthrough of the fluid to be filtered by filter mats.

Regarding claim 2, Kersting teaches that a configuration preventing bulging in the area of the junction point is formed in that the respective folds (2, 3) of the filter mat web (14) on the ends are joined to each other along the end edges which face the inside of the annular element (1) to be formed, so that the two folds (2) adjoining the junction point are positioned with their crowns on the outside on the annular element (1) (see figures 1-3; col. 2, line 17 – col. 3, line 15) and facing the support tube (12) of Bies et al.

Regarding claim 3, Kersting teaches that filter mat (1) is made of one or more sheets of conventional, non-woven, fibrous filter sheets material which are inherently flexible (see col. 2, lines 24-31) absent persuasive evidence.

Regarding claim 4, Kersting teaches that the connection of the ends (2) of the filter mat web (1) is in the form of a fused seam by adhesive material (9) (see figures 1-3; col. 2, line 17 – col. 3, line 15).

Regarding claim 5, the annular element (1) of Kersting is inherently reversible to provide fused seam by adhesive material (9) in the interior on the reversed annular element (1) (see figure 1).

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patent No. 6,863,758 and 6,949,155 teach filter element with fused seams.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOHN KIM whose telephone number is (571)272-1142. The examiner can normally be reached on Monday-Friday 7 a.m. - 3:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Sample can be reached on 571-272-1376. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/John Kim/
Primary Examiner, Art Unit 1797

JK
2/19/08